

RPG372Ra01 1

Recombinant ATPase, Na⁺/K⁺ Transporting Alpha 4 Polypeptide (ATP1a4)

Organism Species: *Rattus norvegicus* (Rat)

Instruction manual

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression

Host: *E.coli*

Residues: Met1~Pro92

Tags: N-terminal His Tag

Subcellular Location: Membrane

Purity: > 95%

Traits: Freeze-dried powder

Buffer formulation: PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.

Original Concentration: 100µg

Applications: Positive Control; Immunogen; SDS-PAGE; WB.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 9.0

Predicted Molecular Mass: 13.9kDa

Accurate Molecular Mass: 17kDa as determined by SDS-PAGE reducing conditions.

Phenomenon explanation:

The possible reasons that the actual band size differs from the predicted are as follows:

1. Splice variants: Alternative splicing may create different sized proteins from the same gene.
2. Relative charge: The composition of amino acids may affect the charge of the protein.
3. Post-translational modification: Phosphorylation, glycosylation, methylation etc.
4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form.
5. Polymerization of the target protein: Dimerization, multimerization etc.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[**SEQUENCE**]

MEPGKETAAT SEQKPRPTLR ASNTNRQPKV KRRKKDLEEL KKEVVMDDHK LTLDELSAKY SVDLTKGLSV TDAQEILTLN GPNVLTTPPT TP

[**IDENTIFICATION**]



[**IMPORTANT NOTE**]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.